- 28. (New) The method according to claim 27, wherein a user operates a resume command by the task control mechanism, thereby advancing the current suspend command.
- 29. (New) The method according to claim 27, wherein the task control mechanism of the run time system comprises breakpoint debugging and variable that can be pre-assigned by the user in the engineering system, further comprising the step of pre-assigning variables corresponding to breakpoints
- 30. (New) The method according to claim 29 wherein the variable pre-assignments in the task control mechanism are performed by programs of the run time system other than the task control mechanism.
- 31. (New) The method according claim 26, comprising the steps of:
  - a) generating a structured textual language from the flowchart;
  - b) converting the structured textual language into a processor-independent pseudo-code;
  - c) loading the processor-independent pseudo-code into the controller;
  - d) converting the processor-independent pseudo-code into executable processor code.
- 32. (New) The method according to claim 26, wherein a debugging interface is available to a user at the level comprising one of the group consisting of the structured textual language level, the pseudo-code level, and the processor code level.
- 33. (New) A method according to claim 26, wherein programming language commands are provided in the flowchart editor as a function of configuration of hardware associated with the industrial controller.
- 34. (New) The method according to claim 26, wherein additional graphical elements are generated in motion control flowchart representation by converting user-defined structured text subprograms of the textual language the graphical elements comprising function interfaces of the corresponding structured text subprograms.

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- 35. (New) The method according to claim 34, wherein the generated graphical elements are used as language elements of the motion control flowchart.
- (New) The method according to claim 26, wherein structured text according to IEC6-1131 is used as the structured textual language.
- 37. (New) The method according to claim 36, wherein a user can switch between structured textual language, contact plan and function plan as forms of representation for formulation conditions.
- 38. (New) The method according to claim 26, wherein at least one of the group consisting of a loop and a parallel branch is present as a programming language command in the motion control flowchart view.
- 39. (New) The method according to claim 38, wherein a parallel branch is initiated an wherein individual commands are initiated in a given interpolator cycle within a respective parallel branch.
- 40. (New) The method according claim 26, wherein parameters can be set for function blocks by mask input in the motion control flowchart view.
- 41. (New) The method according to claim 26, wherein function blocks are combined into modules that in turn are presented as function blocks in the motion control flowchart view.
- 42. (New) The method according to claim 41, wherein modules are interleaved in the motion control flowchart view.
- 43. (New) The method according to claim 41, wherein the function blocks for the allocation of variables in the motion control flowchart view comprise multiple instructions.

- 44. (New) The method according to claim 41, wherein the function blocks representing functions that require a given period of time comprise advance conditions in the flowchart view.
- 45. (New) The method according to claim 26, wherein the graphical elements of the flowchart are positioned automatically.
- 46. (New) The method according to claim 26, wherein the graphical elements of the flowchart are linked together automatically.
- 47. (New) The method according to claim 26, wherein the flowchart is displayed in a form comprising one of the group consisting of reduced form and on or enlarged form.
- 48. (New) The method according to claim 31, wherein re-translation back into motion control flowchart representation is possible by means of marks in the textual language.
- 49. (New) The method according to claim 26, wherein steps a) through c) are triggered in a collective step.
- 50. (New) The method according to claim 26, wherein during processing of the flowchart program a currently processed graphical element is displayed.